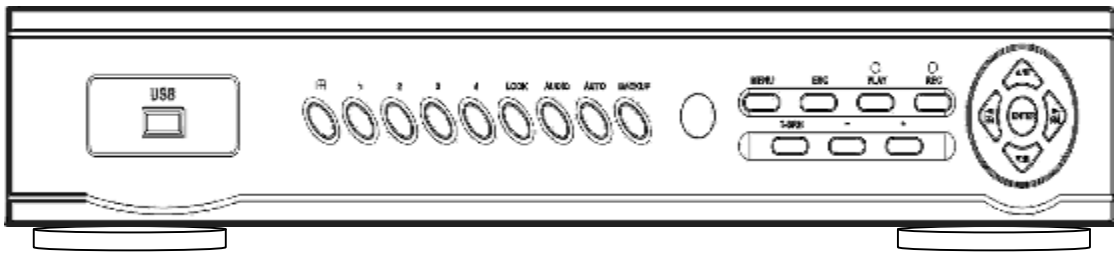
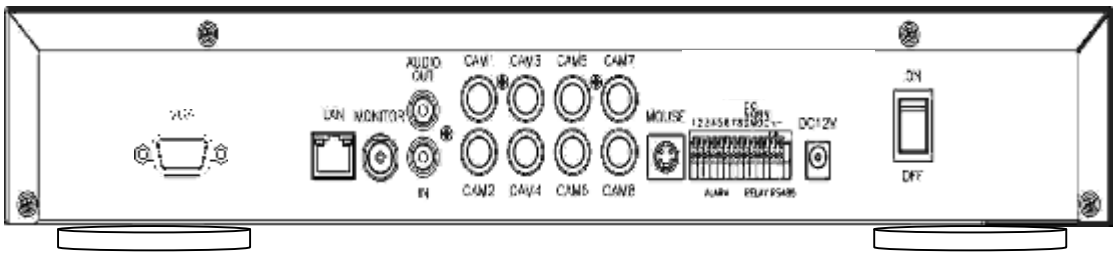
FRONT PANEL



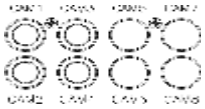
1. ⊞ : Quad screen mode button
2. **CHANNEL 1** : Channel 1 full screen button
3. **CHANNEL 2** : Channel 2 full screen button
4. **CHANNEL 3** : Channel 3 full screen button
5. **CHANNEL 4** : Channel 4 full screen button
6. **LOCK** : Press this button to Key Lock function
7. **AUDIO** : Audio on or off button
8. **AUTO** : Auto sequence mode
9. **BACKUP** : Image backup button
10. **UP / STOP** : Direction button UP / Playback stop button ▲ / ■
11. **DOWN / PAUSE** : Direction button down / Playback pause ▼/ ▮▮ (Step play)
12. **REW** : Reverse playback choose button / play speed ◀ / ◀◀
13. **FF** : Forward playback choose button / play speed ▶ / ▶▶
14. **ENTER** : Enter button or value change
15. **MENU BUTTON** : Press this button to display the menu setup
16. **ESC** : Press this button to exit menu
17. **T-SRH** : Press this button to playback time search
18. **PLAY BUTTON** : Press this button to playback
19. **+ BUTTON** : Increase + values change.
20. **REC BUTTON** : Press this button to start recording image
21. **- BUTTON** : Reduce - values change
22. **USB 2.0** : Pan Driver slot ▭

*User needs to plug in USB again if ActiveX loaded; image backup or version updated.

REAR PANEL



Power in 12V/5A, power switch (ON / OFF)

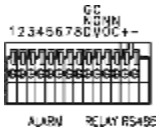


Camera 1 ~ 4 input BNC type (8 Channel pictured)

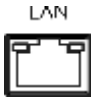
Monitor out

VGA out (not available)

Audio channel input x 1 and output x 1



Alarm / Relay / RS 485 connector



RJ-45 (Network connector)

PS 2 type mouse connector

Mouse Control

① Screen display	1. Double-click of the left button on desired camera to full channel 2. Double-click of the left button on desired camera to quad screen
③ Menu display	1. One-click of the right button to menu OSD 2. Back to last OSD page
② None	No function
① Select	1. One-click on the item of OSD 2. One-click on the value of item 3. One-click on the Exit to quit and save menu 4. From right-up to left-below and the set motion detect area

Operate:

MENU BUTTON : Press MENU button to enter menu setup or exit

ESC BUTTON : Press ESC button to exit menu

ENTER BUTTON : Press Enter button to confirm set or value change

DIRECTION BUTTON : MENU item select

+ BUTTON : Increase + values change

- BUTTON : Reduce - values change

BACKUP : To backup mode

(△▽) MOVE (ENT) SELECT (MENU) EXIT

Remote controller (Option):

The key on the remote controller function control is same as the front keypad of the unit.

User please operate according to the DVR model that you purchased

Number : Channel select 1 ~ 4

Quad :

Auto : Channel sequence

Audio : Audio on / off

PTZ : To PTZ mode

UP / STOP : Direction button UP / Playback stop button

REW : Reverse playback choose button

DOWN / PAUSE : Direction button down / Playback pause

FF : Forward playback choose button

ENTER : Enter button or value change

MENU BUTTON : Press this button to display the menu setup

BKUP : Image backup button

ESC : Press this button to exit menu

T-SRH : Press this button to playback time search

PLAY : Press this button to playback

REC BUTTON : Press this button to start recording image

+ BUTTON : Increase + values change ▷

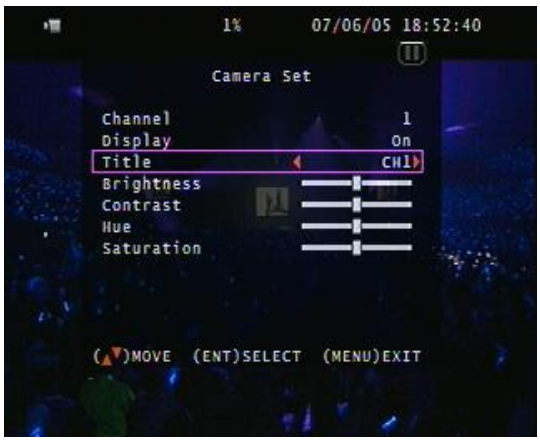
- BUTTON : Reduce - values change ◁

Main MENU – Camera Set

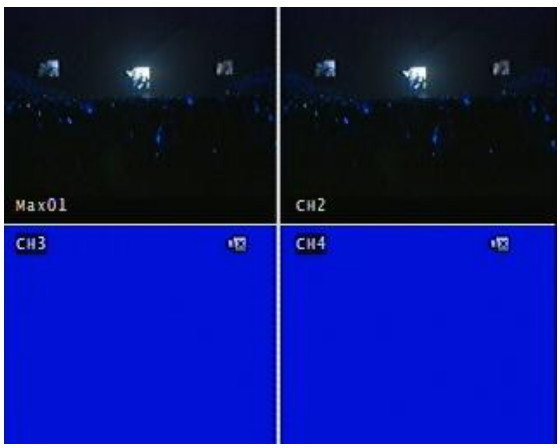
Right adjustment of each element will increase picture quarterly displayed. We recommend you to adjust each element of cameras and monitor to be connected to the DVR unit.

Main MENU – Camera Set – Title

Camera title setup function allows 5 characters for each channel.

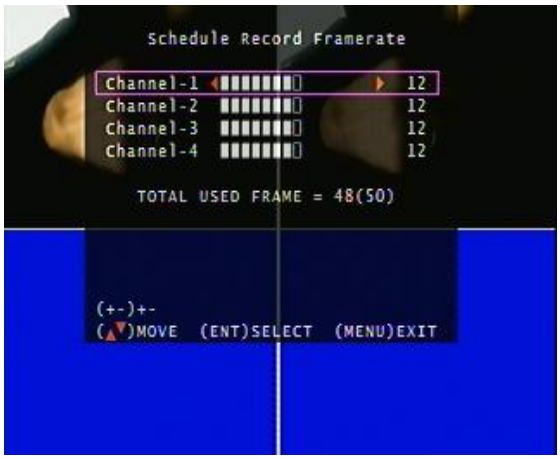


Select Shift to next page and then Enter to confirm camera title.



Main Menu – Record Set

Record Set – Schedule Record Framerate



Record Set – Motion Record Framerate

Record Set – Alarm Record Framerate

Record Set – Record Quality: High / Normal / Low

Record Set – Event Rec Duration: 5 / 10 / 15 / 20 / 25 / 30

Record Set – Auto Record: After 1 ~ 8 minutes, auto start to record if no operation.

Record Set - Data Retention Set: 1 ~ 15 days

Record Set – Schedule Record

23%
2007/08/19 12:32:21
Schedule Record
0 0 0 0 0 1 1 1 1 1 2 2
0 2 4 6 8 0 2 4 6 8 0 2
No Record
Schedule Record
Motion Record
Alarm Record
Schedule + MD + Alarm Record
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Notice:

1. Each channel has own frame rate adjustment of each recording mode.
2. In 24 hours, user can adjust each channel frame rate of different record mode. Such as schedule, motion detection, and alarm record more.
3. Press ⊞ button to change different of record modes.

Schedule record mode

23%
2007/08/19 12:33:33
Schedule Record
0 0 0 0 0 1 1 1 1 1 2 2
0 2 4 6 8 0 2 4 6 8 0 2
No Record
Schedule Record
Motion Record
Alarm Record
Schedule + MD + Alarm Record
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Motion record mode

23%
2007/08/19 12:33:35
Schedule Record
0 0 0 0 0 1 1 1 1 1 2 2
0 2 4 6 8 0 2 4 6 8 0 2
No Record
Schedule Record
Motion Record
Alarm Record
Schedule + MD + Alarm Record
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Alarm record mode

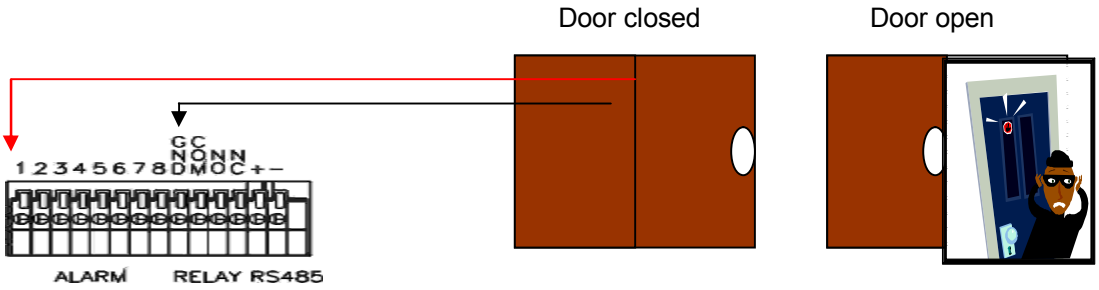
23%
2007/08/19 12:33:37
Schedule Record
0 0 0 0 0 1 1 1 1 1 2 2
0 2 4 6 8 0 2 4 6 8 0 2
No Record
Schedule Record
Motion Record
Alarm Record
Schedule + MD + Alarm Record
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Schedule, motion, and alarm record mode

23%
2007/08/19 12:33:38
Schedule Record
0 0 0 0 0 1 1 1 1 1 2 2
0 2 4 6 8 0 2 4 6 8 0 2
No Record
Schedule Record
Motion Record
Alarm Record
Schedule + MD + Alarm Record
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Main Menu – Alarm Detection

Alarm Signal type depends on Alarm Sensor polarity define on NO (N/Open) or NC (N/Close) mode. Alarm POP UP: Event channel jumps to full screen when alarm triggered. Quad screen with the alarm symbol if more than two cameras triggered.

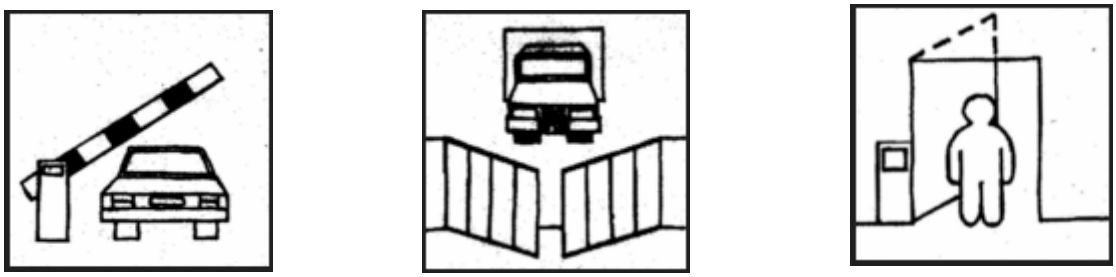


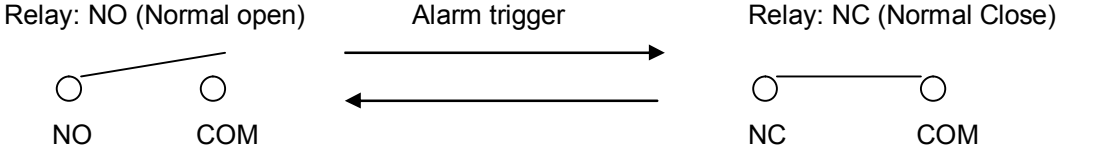
Relay: NO + COM or NC + COM

Alarm Signal type depends on Alarm Sensor polarity define on NO (N/Open) or NC (N/Close) mode.

NO + COM: Normally, motion relay is NO + COM connector.

Relay action:





Main Menu – Motion Detection

Main Menu – Motion Detection – Motion Area

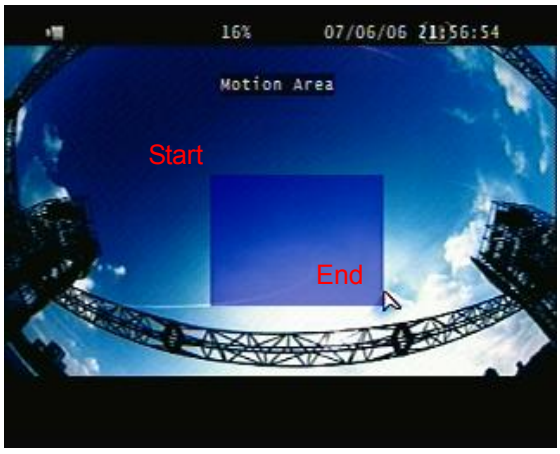
Detected area

Alarm POP UP: Alarm channel jumps to full screen when motion triggered. Quad screen with the alarm symbol if more than two cameras triggered.

Main Menu – Motion Detection – Motion area selection

Direction button Left or Right + ENTER to cancel detection area.

Select start (right-up corner) point and end (left-below corner) point of detect area.

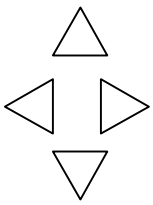


One-click of the mouse left button to cancel detect area.

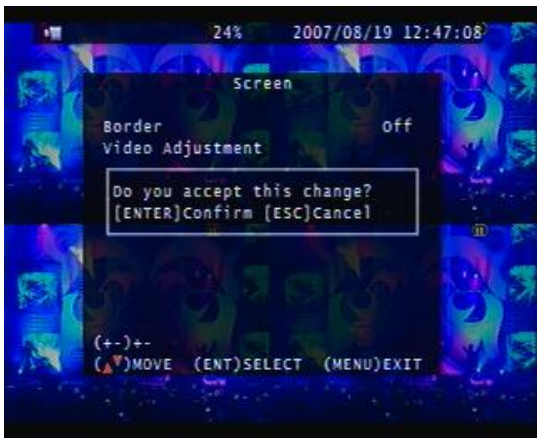
Select start (right-up corner) point and end (left-below corner) point of detect area.

Main Menu – Screen – Border: Quad border On / Off display

Main Menu – Screen – Video Adjustment: Video screen position movement



Main Menu – Screen – VGA Frequency and VGA



After adjusted, press ENTER to see if it has change the dialogue resolution, press ENTER to change, press ESC to cancel. If user does not make any change, the mode will change back to last status after 15 seconds.

VGA not available.

Main Menu – Audio Set

- If microphone, audio line in or any how, user please set the audio record mode to on and also adjust volume input or output to right sound effects.
- Mute means live audio is turn on or quiet.
- Please format hard disk before starting recording after all the HDD installation

Main Menu – System Set – Hard Disk

Main Menu – System Set – Format HDD

Main Menu – System Set – Hard Disk Setup – Format HDD – Password

37%
07/06/06 10:48:40
Format HDD
Password
111111
1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ]
a s d f g h j k l ; Shift
z x c v b n m , . / Enter
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

HDD was formatted successful.

- Before hard disk format, user needs to put the right password. The password is same as unlock which is default 111111.
- Please set HDD to Master if only one installed. Second one to Slave.
- Hard Disk Master and Slave jumper pin must right, otherwise it makes DVR work fault.
- Please format hard disk before starting recording after all the HDD installation

Main Menu – System Set – Security Protection - Password Change

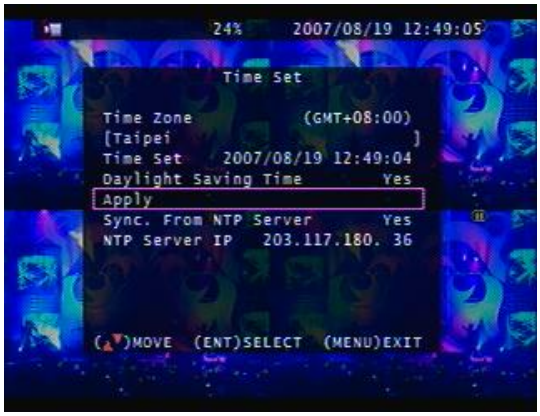
Menu Protection:

On / Off. User needs to login password before enter to menu.

Auto Key Lock:

After 1 ~ 60 seconds system automatically key lock which means before operate DVR user needs to unlock.

Main Menu – System Set – Time Set



Select time zone and auto time synchronization with NTP server. Network is required on NTP server. NTP server does not work under network DHCP mode. After time set or daylight mode turns to on, user needs to Apply and confirm. 0 ~ 9 is repeatable with increase + button, And decrease - button is opposite. If the DVR is under a network system, suggest enable **NTP server** to get a network request automatically.

Main Menu – System Set – Dwell Time Setup (Channel auto sequence)

Main Menu – System Set – Network Settings **Network Settings – Local IP**

Network Settings – Local IP – STATIC

Select static IP address / Gateway / Net Mask

Network Settings – Local IP – DHCP

Auto IP detected under IP sharing or router

Main Menu – System Set – Network – PPPOE

0%
07/06/06 11:44:48
Local IP
PPPOE ID
88943345----------
1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ]
a s d f g h j k l ; Shift
z x c v b n m , . / Enter
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Main Menu – System Set – Network – PPPOE ID

0%
07/06/06 11:56:32
Local IP
PPPOE ID
88943345@hinet.net
1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ]
a s d f g h j k l ; Shift
z x c v b n m , . / Enter
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

If the DVR is under a network system, suggest enable **Main Menu – System Set – Time Set NTP server** to get a network request automatically.

Main Menu – System Set – Network – PPPOE – Password

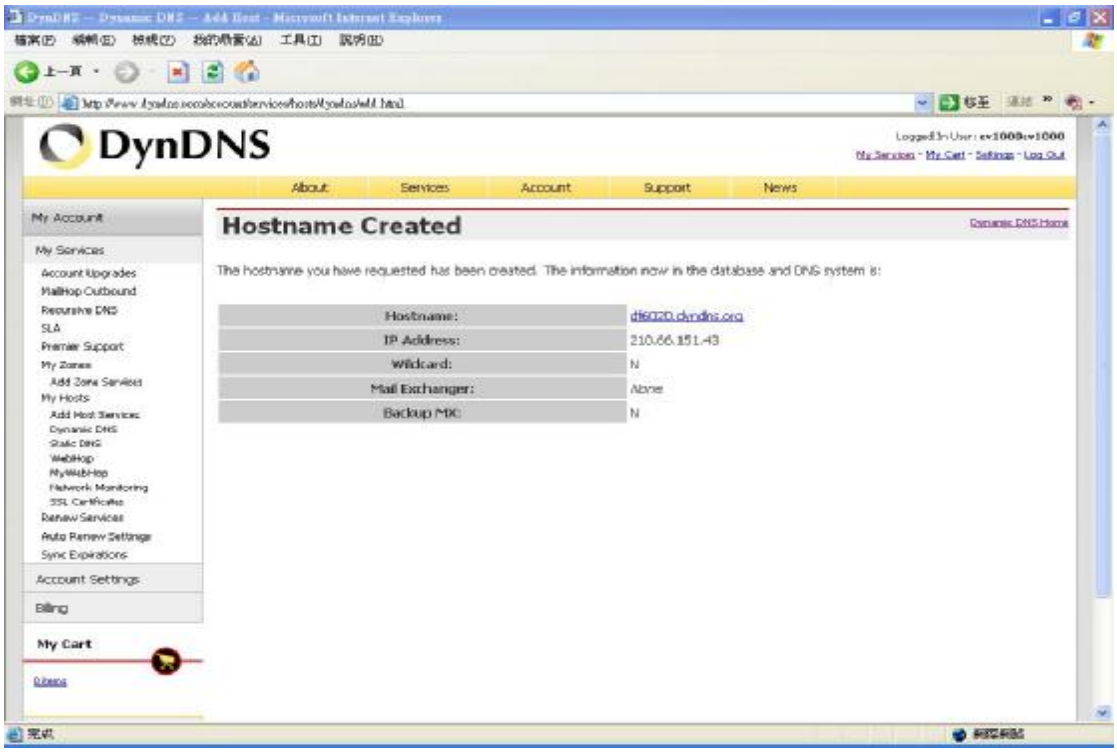
0%
07/06/06 12:00:51
Local IP
PPPOE Password
2gjuiuuu--------
1 2 3 4 5 6 7 8 9 0 - = ←
q w e r t y u i o p [ ]
a s d f g h j k l ; Shift
z x c v b n m , . / Enter
(▲▼)MOVE (ENT)SELECT (MENU)EXIT

Input PPPoE account and password. And then save & exit menu. After a while, back to network set again, user would see IP appears.
IP would not correctly appear on screen if any firewall or router authority management.

User type the IP to Net viewer or IE browser to view image via network.

Main Menu – System Set – Network – D/DNS set

Ex: Create a new df6020 host name, after add a new host name; DynDNS page shows a confirm message page.



Enable : YES

DNS Server: From ISP

DDNS Server: DynDNS.

HOST Name: Insert host name

User Name: Insert DynDNS username

Password: Insert DynDNS password

On IE browser blank bar, type df6020.dyndns.org; and then user can get on line.

DNS address is required. (Please ask local ISP). DNS only works under DDNS mode.

Network stream speed depends on the locality bandwidth.

Advice user apply network speed Upload 512K / Download 512K or more, to avoid image data too big influence the remote quality.

Main Menu – System Set – RS-485

Main Menu – System Set – Pan/Tilt Device

Control: Keypad, mouse

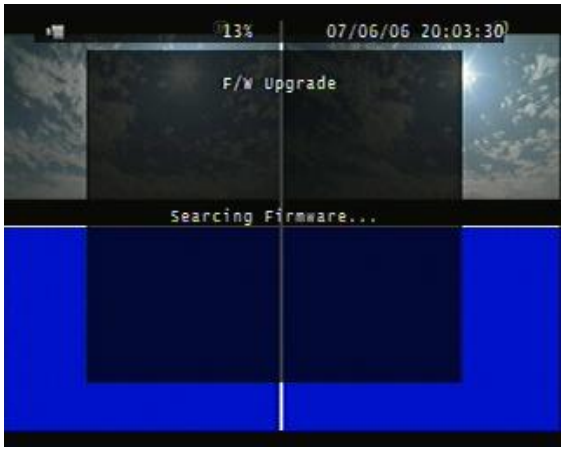
* Mouse control: press ESC to PTZ mode, press AUTO button, and then once-click left button of mouse to control PTZ movement.

Press quad button + number 1 ~ 4 button to set presets, press AUDIO + 1 ~ 4 to call preset. Press AUTO to start auto presets, AUTO again to cancel.

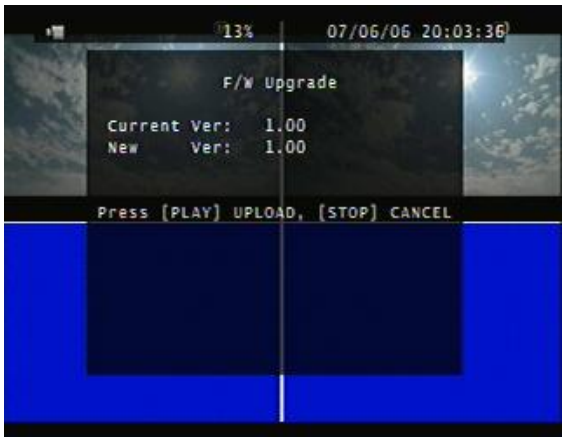
The AUTO command is 76 + Preset. The command would be different if connect to others PTZ dome. It is normal if no any action after press AUTO.

Main Menu – System Set – F/W Upgrade

Stop all hard disk working before update, select F/W upgrade and then press ENTER to search firmware.



Press PLAY to start version update.

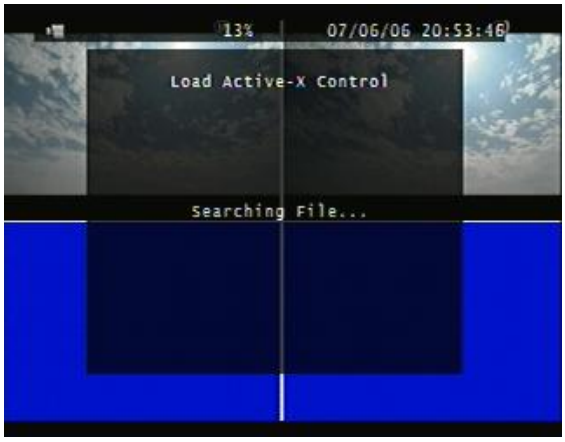


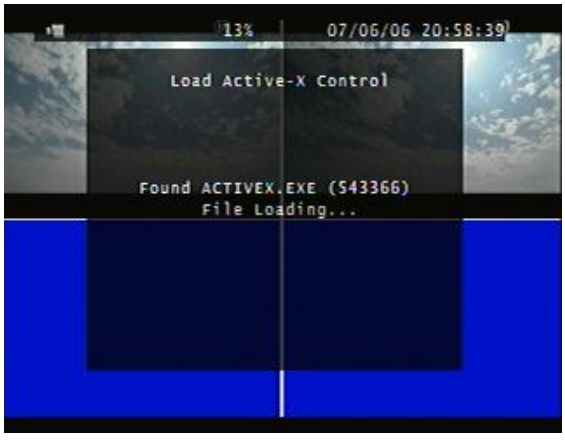
DVR auto reboot after version update.

Main Menu – System Set – BUZZER SETUP

Main Menu – System Set – Load Active-X Control

Stop all hard disk working before load Active-X control





1. Before DVR IE connection, please download the ActiveX to DVR hard disk from CD-ROM, and then you can view DVR image via internet any PC.
   Steps: CD disk → ActiveX →USB pan drive → DVR (with hard disk) USB →
   Menu - System Set – Load Active-X Control → ENTER button

2. Also install ActiveX to your personal computer. Net viewer is packaged with ActiveX.exe.

Main Menu – Search

Main Menu – Search – TIME LIST

Main Menu – Search – Event List

Main Menu – Search – Time Search

Press ENTER to select data and time. Direction left and right button to move value item.

ENTER or + / - button to change value.

Main Menu – Search – Time Search: After data and time select, go to Search and then press ENTER to start playback.

Playing

Forward speed: x 2 / x 3 / x 4 (Direction right button)

Reverse speed: x 8 / x 16 / x 32 (Direction left button)

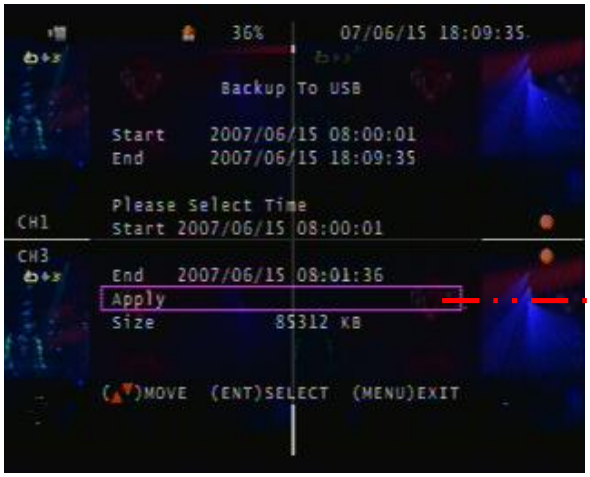
Press STOP to search list, press ESC to live mode.

Backup mode: Before backup, USB pan driver is required. Back up file size can not exceed 1GB, when system reads USB (thumb driver only) device, the system will stop recording about 2 seconds

Mode 1: On live mode, press backup button to file backup page.

Total hard disk data time range

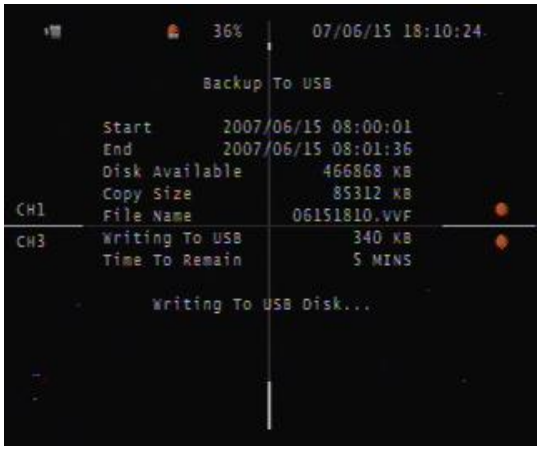
Select start and end time of backup



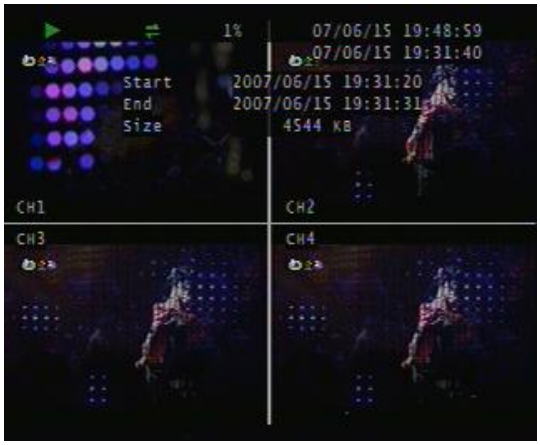
After select backup time, apply to count data size. After size appears, press backup button to USB page.

DVR is reading pan driver

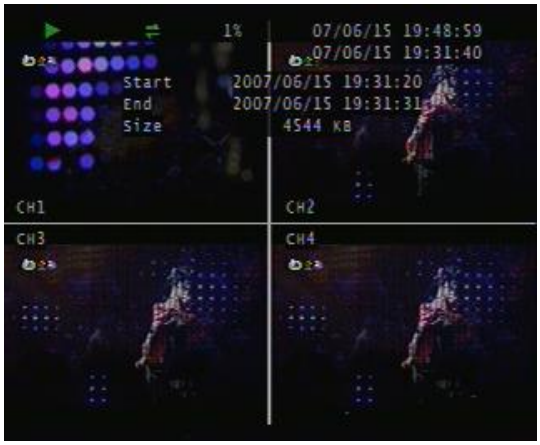
After a while, all backup information display on screen, user now can press backup button to start file backup. Data is writing to USB pan drive, users please wait until backup complete. Press menu button to quit USB page.



Mode 2: Press play button to start playback, the playback beginning time is the last one hour record. Press + and – to select backup time. User only can increase seconds in this backup way. Press backup button to USB page which is same as mode 1.



Mode 3: On mode 2, user can press T-SRH button to the page like mode 1, and then to mode 3. Here, user only can adjust End date and time, after the back way is same as mode 1.



Mode 4: On event list, choose an event record data, and then press backup button.

Pages go to USB page, after data size appears, press backup button to the page which is same as mode 1

USB compatible(Max. 4G)

ADATA / Transcend / San Disk / Kingston

Net viewer

① ②

③ ④ ⑤ ⑥

Viewer function:

1. Backup file player
2. Network viewer
3. Connection

DVR control via viewer:*

4. DVR screen: Quad, Camera 1 ~ 4 full screen / Key lock / Channel auto sequence.
   Audio ON : stream speed – not good. OFF : stream speed – good
5. DVR function: MENU / ESC / Play / REC / T-SRH / - values change / + values change
6. DVR direction button: Up (Item select, Play Stop) / Down (Item select, Play Pause)
   Left (Item select, Play Reverse) / Right (Item select, Play Forward)
   SEL (ENTER): Item confirm/select, values change)
7. DVR menu pop-up
8. Audio volume (PC site)

*Viewer control panel button is same as DVR keypad.

*Viewer and DVR display is synchronously.

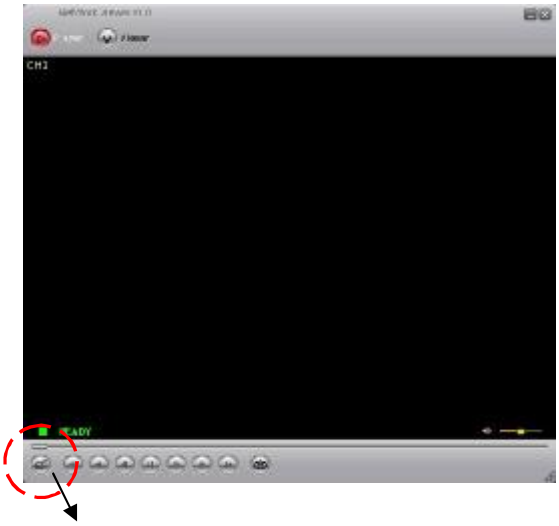
*PTZ control is supported on viewer and control way is same as DVR keypad.

*PTZ control and movement speed depends on network streaming.

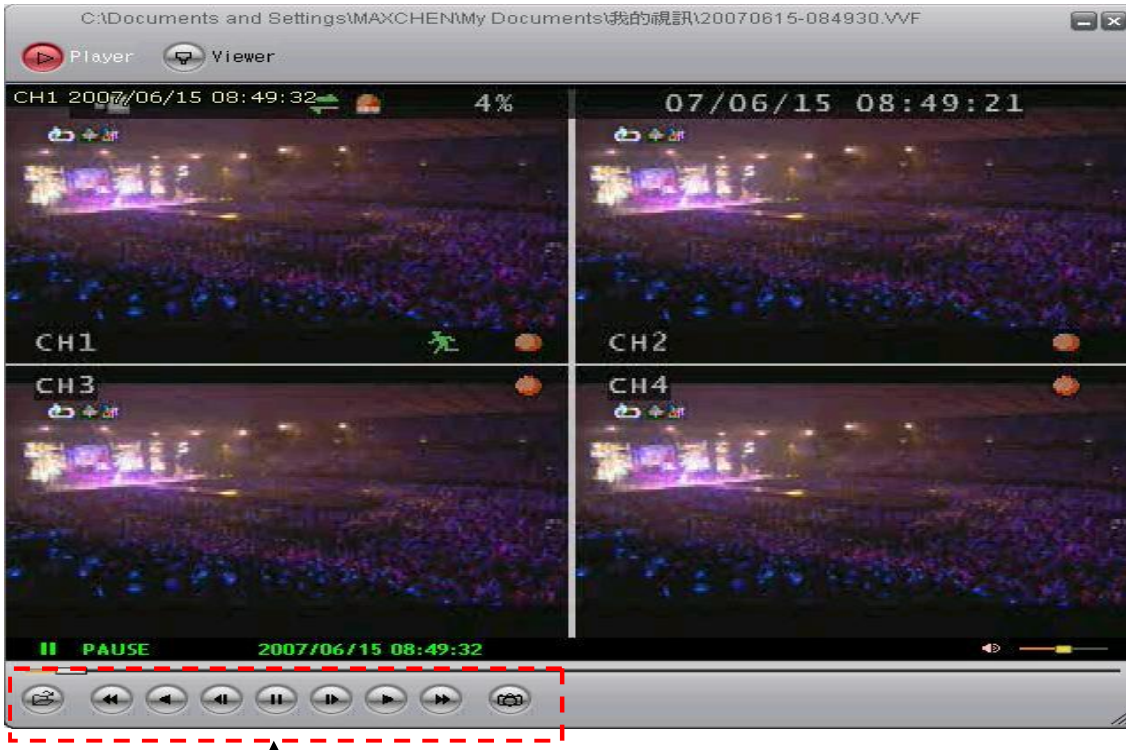
Viewer configures:

Player	Switch to backup file play mode
Netviewer	Switch to DVR network viewer
Disconnect	Network log out and connect canceled
Dvr Control	DVR function control
Audio	Audio volume adjust (PC site)
Local Recording	Viewing image record
Always On Top	Player or viewer always on top even other data folders open
Full Screen	Viewer change to full screen
Maximize	Full screen display
Aspect Ratio	Resolution 640 x 448 / 640 x 544 adjust
Options	Viewer function setup
	Always on Top: Player or viewer always on top even other data folders open
	Auto Reconnection: Reconnection if non artificial network disconnect.
	Path for local recording: Please select a path of your PC.
About Viewer	Viewer version
Exit	Close viewer

File Player:



Click browser to open file which you saved



Player button

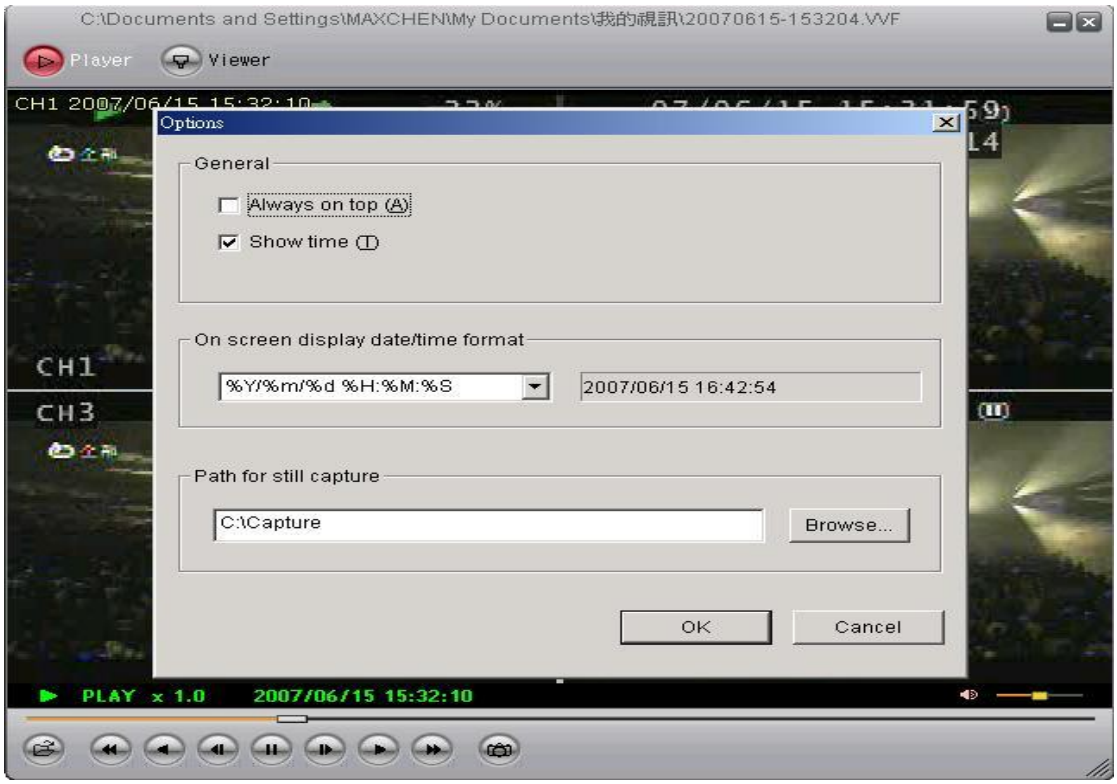
Open \ Fast Backward \ Play Reverse \ Previous Frame \ Pause \ Next Frame \ Play Fast Forward \ Still Capture

1. DVR USB or net viewer backup file (*.VVF)only read in player
2. Local recording file only read in player, except transfer to AVI.
3. Backup file includes video and audio

Player Configure:

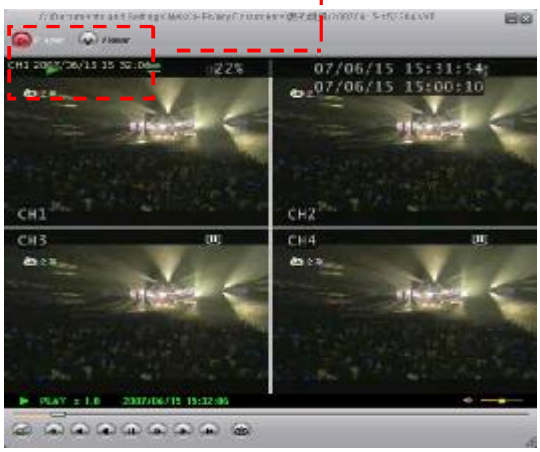
Player	Switch to backup file play mode
Netviewer	Switch to DVR network viewer
Open File	Open the backup file which saved in any path
Open Disk	Open the DVR hard disk which is installed to PC IDE slot
Export	Backup file to AVI files transform (Video + Audio). See AVI page
Close	Player Button control disable
Show time	Show the backup beginning time
Always on Top	Player always on top even other data folders opened
Playback	Play back mode and speed select. Same as Player button
Audio	Audio volume adjust (PC site)
Full screen	Player screen to full size
Maximize	Player to full of screen
Aspect Ratio	Player resolution adjust
Options	See Next page
About viewer	Version of viewer
Exit	Player and viewer exit

Options



Always on top: Player always on top even other data folders opened

Show time: Show the PC time of when user start recording backup file



On Screen display date/time (Show time) format: Please select the date format you want.

%Y/%m/%d %H:%M:%S: 2007/06/15 15:32:29

%y/%m/%d %H:%M:%S: 07/06/15 15:32:29

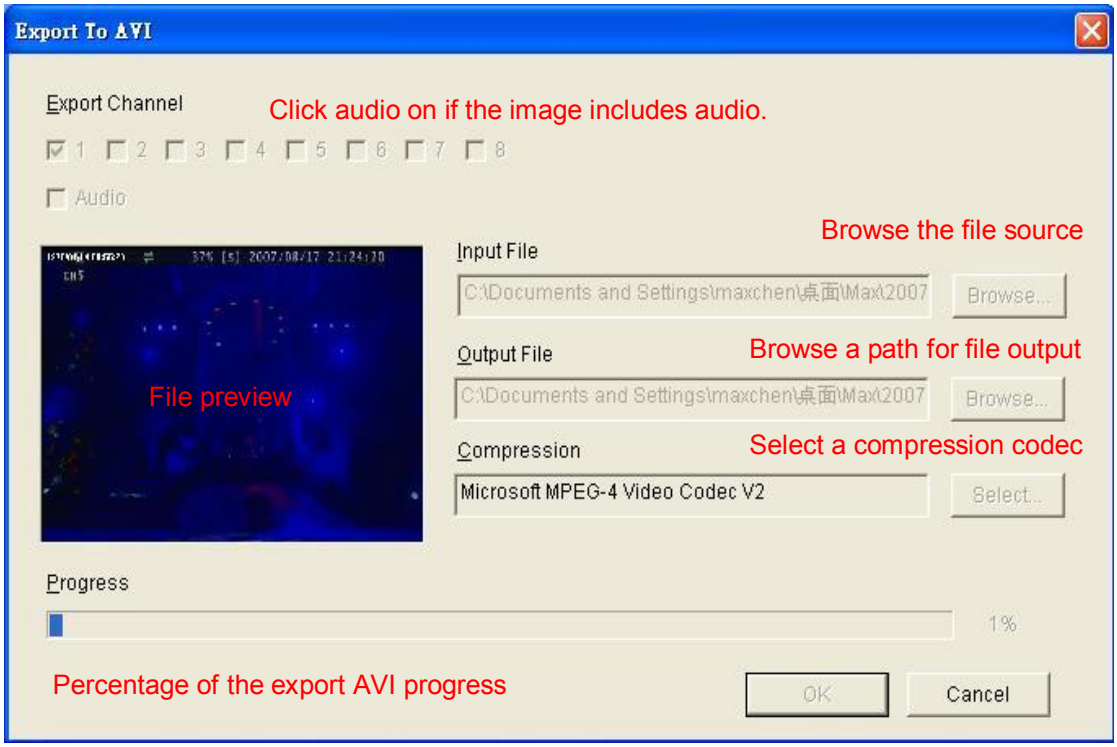
%Y/%m/%d %p %I:%M:%S: 2007/06/15 PM 03:32:29

%y/%m/%d %p %I:%M:%S: 07/06/15 PM 03:32:29

%b %d %H:%M:%S %Y: JUN 15 15:32:29 2007

%b %d %p %I:%M:%S %Y: JUN 15 PM 03:32:29 2007

VVF file export to AVI



Users please wait until file export completed.

PTZ Control mode

Channel / Direction

Near / Far, Call OSD,
Menu confirm

Select camera channel

Set presets

Zoom -- / + : Lens, Near / Far

Menu: Call PTZ OSD

Enter: OSD value confirm

Channel: Select PTZ channel

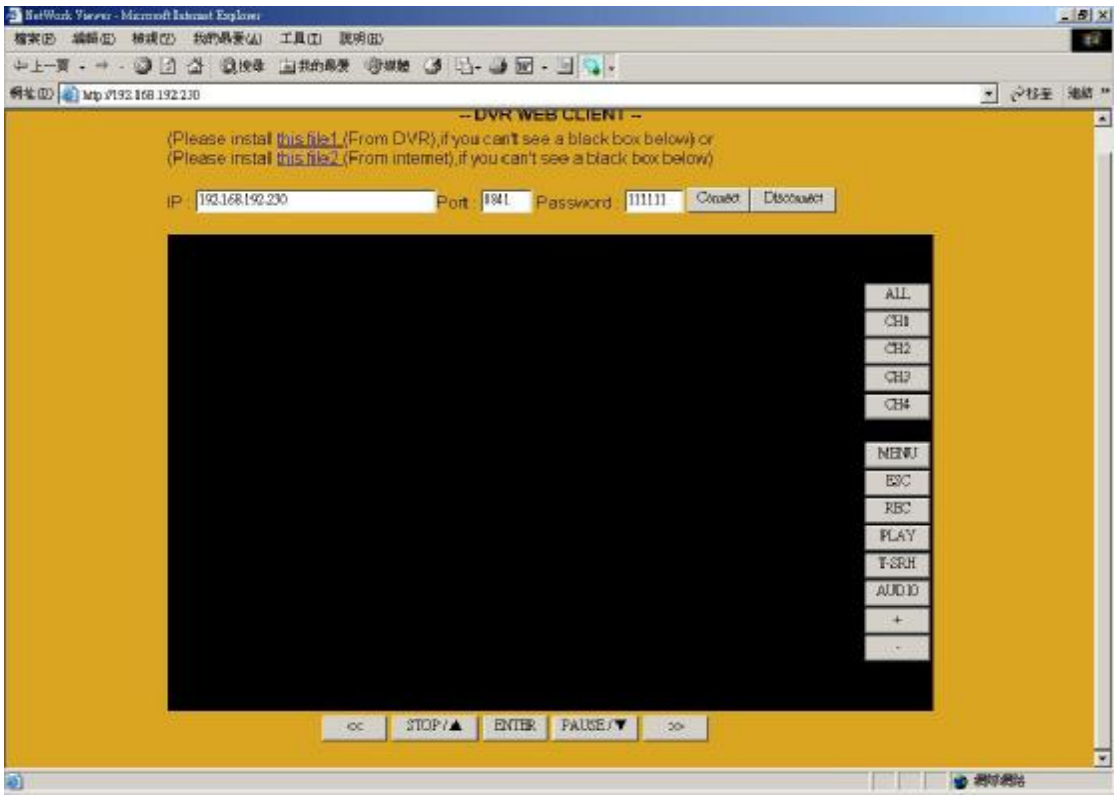
Preset: Preset setup

Select preset 1 ~ 4, and then click SET to save. Click CALL to run preset.

Click AUTO to start all presets. Click STOP to terminate.

CLEAR, delete preset 1 ~ 4

IE browser:



IE control button is same as DVR keypad.

1. Before DVR IE connection, please download the ActiveX to DVR hard disk from CD-ROM, and then you can view DVR image via internet any PC.
   Steps: CD disk → ActiveX →USB pan drive → DVR (with hard disk) USB →
   Menu - System Set – Load Active-X Control → ENTER button

2. Also install ActiveX to your personal computer. Net viewer is packaged with ActiveX.exe.